DOCUMENT RESUME

ED 471 126 CE 084 135

AUTHOR	Long, Michael
TITLE	Workplace Training: The Experience of Young Australian Workers. Working Paper.
INSTITUTION	Monash Univ., Clayton, Victoria (Australia). Centre for the Economics of Education and Training.
SPONS AGENCY	Australian National Training Authority, Melbourne.
REPORT NO	CEET-WP-45
PUB DATE	2002-08-00
NOTE	47p.
AVAILABLE FROM	For full text: http://www.education.monash.edu.au/centres/ceet/WP45.pdf.
PUB TYPE	Reports - Research (143)
EDRS PRICE	EDRS Price MF01/PC02 Plus Postage.
DESCRIPTORS	Access to Education; Corporate Education; Developed Nations; *Education Work Relationship; Educational Background; Family Characteristics; Foreign Countries; Independent Study; Individual Characteristics; Industrial Training; Longitudinal Studies; *On the Job Training; *Outcomes of Education; *Participation; Promotion (Occupational); Salary Wage Differentials; *Trainees; *Young Adults
IDENTIFIERS	Australia

ABSTRACT

Analysis of the workplace training experiences of the 1995 cohort of the Longitudinal Surveys of Australian Youth at age 19 in 2000 (n=7,889, 58% response rate) focused on the 85% of respondents currently employed or employed during the last year. The following elements were studied: participation in training (reasons, outcomes, adequacy); background characteristics (socioeconomic, ethnic/indigenous, disability); education level; and employment (occupation/industry, working hours, status, tenure, earnings). One-quarter received in-house training, over one-third other training, and nearly half had taught themselves. Reasons for training included work changes (36.1%) and new technology (27.7%). For males (45.1%) more than females (38.8%), training resulted in promotion, pay raise, or increased responsibility; most felt their training was transferable to other employment. For males, lower socioeconomic status was associated with less training. Those from non-English backgrounds and workers with disabilities were less likely to participate. The relationship between higher educational qualifications and more training was stronger for males in in-house training. Both shorter and longer tenure was associated with lower training rates. Few relationships were found between background and satisfaction with or adequacy of training. Less satisfaction with training opportunities was associated with higher literacy/numeracy, completion of Year 12, full-time or no study, and lower-skilled occupations. (Contains 32 references and 13 tables.) (SK)

Workplace Training: The Experience of Young Australian Workers

Michael Long

WORKING PAPER No. 45

August 2002

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The Centre for the Economics of Education and Training is funded by the Commonwealth Government through the Australian National Training Authority as a Key Vocational Education and Training Research Centre

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CEET, Faculty of Education, Post Office Box 6,Monash University, Victoria 3800, Australia
Telephone 61 3 9905 9157 Facsimile 61 3 9905 9184 Email ceet@education.monash.edu.au
http://www.education.monash.edu.au/centres/ceet

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CEET, Faculty of Education, PO Box 6, Monash University, Victoria 3800, Australia
Telephone: 61 3 9905 9157 Facsimile: 61 3 9905 9184 Email: ceet@education.monash.edu.au
www.education.monash.edu.au/centres/ceet

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EXECUTIVE SUMMARY

This report presents results from analyses of the workplace training experience reported by member of the 1995 cohort of the *Longitudinal Surveys of Australian Youth* (LSAY) when they were about 19 years old in 2000.

Increased rates of technological, organisational and economic change, together with the aging of the workforce, mean that initial education needs to be updated. Workplace education and training provides an important source of on-going skills development for Australian workers. Expenditure by firms on workplace education and training is about 0.8% of GDP or equal to about 15% of total expenditure on formal education.

The match between work and workplace training and education—workplace training is principally demand-driven and immediately applicable to the work situation—means that workplace training is likely to have a direct effect on worker productivity and, through that, on national competitiveness. The increased need for workplace training, the already significant expenditure on workplace education and training and the efficacy of workplace training on production mean that workplace training is an important object of study.

For young workers, workplace education and training can play an important role in the transition from school to work. The youth labour market in particular is characterised by churning and often marginal attachment to the labour force. Results in this report show that at age 19, some 30% of employees had received an average of a week's structured workplace training during the previous year. An additional 15% received only semi-structured training in the workplace. These are high values given the relatively high proportion of casual and part-time work in the youth labour market.

Participation in initial postcompulsory education is often strongly related to socioeconomic, ethnic and other background characteristics. Results in this report, however, show that participation in workplace education and training is far less dependent on these characteristics—a result that has important implications for equity given the links between workplace education and training an employment outcomes.

This report shows that workplace training is closely related to career advancement and employability for young people. Nearly all the training resulted in improvements in skills. Two-fifths of those who received structured or semi-structured workplace training reported that workplace training *had* helped them get a promotion, pay rise or increased responsibility in their job-and a further two-fifths reported that it *could* help them get a promotion, pay rise or increased responsibility in their job. Most of those who received some training felt that the training would help them to get a job with another employer.

The positive labour market outcomes associated with workplace training suggest that the training is *general*, rather than *specific*, in the sense in which these terms are used in the literature on the economics of education. General training provides skills that are transferable to other firms, while specific training is not useful

outside the firm in which it is provided. It is unlikely that young employees pay directly for access to workplace training. Whether they pay indirectly, by accepting lower wages, as suggested in the training literature, is an issue for further exploration.

Young people who leave school and do not participate in any formal education are a concern for social policy—there is a concern that they will be left behind in the process of skills formation. The absence of a strong link between workplace education and training and family background means that at least for those find employment, lower initial levels of education do not inhibit access to workplace training in their early years in the labour market. The level of participation in workplace training by those not enrolled in VET or higher education courses differed little from the level for the overall sample. For this group, workplace training is an important source of continuing skills formation outside formal educational institutions.

More than three-quarters of the respondents were satisfied with their opportunities for workplace training—but 16% of workers who had received some training thought they needed more. Again, for young workers not enrolled in study, their satisfaction with their opportunities for training and the level of training provided was little different from the overall average.

Employment of young workers is principally in the retail and wholesale industries (34.3%), accommodation, cafes and restaurants (13.3%) and finance property and business services (12.8%), although it varies by gender. Male workers are also disproportionately likely to be employed in the housing and manufacturing industries, while female workers are more likely to be employed in the heath, education, community, recreation and personal service industries. For both males and females, workers in the retail and wholesale and accommodation, cafes and restaurants industries were least likely to be satisfied with their training opportunities. Workers in the accommodation, cafes and restaurants industry were also those most likely to believe that they had received too little training.

The analyses presented in this report are part of a larger project that requires further analyses of the training data and other data on the youth labour market within the *Longitudinal Surveys of Australian Youth.* This progress report contains only simple percentage tables. Corresponding multivariate analyses will be included in the final report. The analyses have been restricted to the incidence of training and the adequacy of training. The final report will extend these analyses to include the outcomes of training.

1. INTRODUCTION

This paper provides some preliminary analyses of the participation in workplace education and training of young Australians. It is based on responses to questions about workplace training asked in the *Longitudinal Survey of Australian Youth* (LSAY) in 2000.

This chapter provides some background to the topic of workplace education and training and LSAY. Subsequent chapters examine the measures of training available in LSAY and the incidence and extent of the training of young people they reveal. The distribution of training—*who receives training?*—is an important consideration for economic equity and efficiency. Chapter 3 discusses the measurement of the various categories of workers and Chapter 4 presents results for the distribution of training across those categories of workers. Chapter 5 looks at the adequacy of training among the various categories of young workers.

1.1 Workplace Training

The *workplace training* that forms the basis of this paper is training that typically takes place at the workplace or away from the workplace but under the auspices of the employee's firm. It is linked to the needs of the firm and takes place within the context of paid work. Typically workplace training is distinguished from study and training that is undertaken in a structured format as part of an educational qualification. Educational qualifications, especially qualifications within the vocational education and training (VET) sector, sometime incorporate aspects of workplace learning, training and assessment. These activities, however, are not part of this report.

Several forms of workplace training are recognised in the literature. A basic distinction is between *formal* and *informal* training. Formal training is a set of structured activities undertaken with the explicit purpose of developing or enhancing the skills of the worker or transferring knowledge to the worker, or both. Such activities are not restricted to classrooms or trainer/trainee situations. Computer-based self-paced learning packages, for instance, fit within this definition.

Within formal training, a distinction is frequently made between *in-house* and *external training*. In-house training, as its name implies, consists principally of employees of the same firm undertaking training together in courses conducted for the firm. Typically it occurs on-site, but it need not. The usage in this report implies that it does occur on site. External training takes place away from the workplace and typically suggests a course conducted by a third party for employees from a range of firms. In this report, however, external training is synonymous with off site training.

Informal training probably provides the bulk of workplace learning—but it is difficult to measure. It is typically unstructured and occurs very much as part of the work process. Various forms can be identified. At its most explicit it might involve a supervisor showing an individual worker how to undertake a certain task. At its

most mundane, it includes learning by repetition—performing a task repeatedly until expertise in the task is developed.

The *amount* of workplace training is often of more interest than its *incidence*. Two common measures of the amount of training are hours and expenditure. Surveys of individual workers are usually restricted to estimates of the hours of training—workers are unlikely to know the costs of workplace training. There is likely to be a reasonable correspondence between hours and expenditure since salary costs are a major component of training. Information on the hours of in-house and external training is available in LSAY. It is more difficult to measure amounts of informal training.

The *outcomes* from workplace training are of considerable interest—whether the training was considered worthwhile, whether it provided new skills, whether the skills are transferable to other jobs or firms and whether the training led to more pay, a promotion or more responsibility. Some outcomes measures are available in LSAY, but they are not the focus of this report.

The *adequacy* of the amount of workplace training provided is a recurring theme in the literature. One approach is simply to ask workers whether they have received enough training in order to do their job. LSAY has such measures and these are a focus of this report. The interpretation of such measures can be misleading. Workers may receive benefits from workplace training without contributing to the costs. Hence from their perspective the provision of more training is rational. From the perspective of the firm, which usually bears the majority of the cost, the provision of more training may be inefficient.

Workplace education and training is important because:

1. There is a lot of it. Employees participate in an average of 16.5 hours of employer-supported formal training in a year (ABS, 1997), which translates into about an additional year of schooling during an employee's working life, and much more for some workers. On average, firms spend about 2.5% of their total wages and salary bill on the training and education of their employees—a total of $m1,179 (ABS, 1996). This is a little over 0.8% of GDP or 15% of total expenditure on education (Long & Lamb 2002). As with any significant economic activity, there is an interest in its efficiency, outcomes and distribution.

2. It is linked to earnings and productivity, both for the individual (Groot 1997; Long 2001) and the firm (Doucouliagos & Sgro 2000). Estimates of the returns to workplace education and training are often higher than for formal educational qualifications, in part reflecting the very applied and context-driven nature of the learning.

3. Employers may provide too little. The high estimates of returns to workplace training suggest that training provision could be expanded until returns decline to levels comparable with other forms of investment. Further, employers typically do not receive the full benefit of the training they provide. Employers risk trained workers leaving the firm and even obtaining employment with competitors. Workers frequently capture some of the benefits of workplace education and training through higher wages (Loewenstein & Spletzer, 1998). To the extent that workers receive benefits from their training proportionately greater than any

contribution to the costs, employers will provide less than optimal levels of workplace training. The suspicion that the provision of training is necessarily sub-optimal underlies many government initiatives world-wide designed to encourage workplace education and training, including Australia's *Training Guarantee* legislation that operated in the early 1990s (Fraser, 1996).

4. It may effect income distribution. To the extent that different categories of workers receive different amounts of training (OECD, 1999), there are implications for the distribution of earnings. Differences in access to workplace training translate into issues of equity. They may also reflect issues of efficiency if differences in access to training among categories of workers are not linked to differences in returns.

5. It may effect international competitiveness. To the extent that firms and nations provide different amounts of training for workers, there are implications for productivity, economic growth and international competitiveness (Porter, *et al.*, 2000).

6. On-going skills development is more important because of an aging workforce. Australia, like other OECD countries, will experience a rapid aging of the population and the workforce during the next ten to twenty years at least (ABS 1998). Less reliance for skills formation can be placed on initial education. Workplace learning is an important source of lifelong learning.

7. Increased technological and organisational change creates demand for new skills that cannot be satisfied by initial education. Existing workers need to update their skills to avoid unemployment and workplace training is the ideal vehicle.

1.2 Longitudinal Surveys of Australian Youth (LSAY)

This report presents analyses of the 1995 cohort of the *Longitudinal Surveys of Australian Youth* (LSAY) (see Robinson, 1996). Table 1 provides an overview of the LSAY sample. The panel was selected in 1995 as a sample of schools stratified by State and school sector. Two Year 9 classes were selected within each school, which resulted in a sample of 13,613 respondents. Further details of the sampling are provided in Long (1996 & 2000). Students completed multiple-choice reading comprehension and mathematics tests and a questionnaire that focused on family background and school experience.

The sample members were sent a questionnaire at their home address in 1996 and thereafter the members of the panel were interviewed annually by telephone. A weighting schema has been used to compensate for the initial disproportionate stratified sample and subsequent differential sample attrition (Marks & Long 2000).

The training questions that are the focus of this report were asked in the second half of 2000 when the majority of the sample had been out of school for at least two years and were about 19 years old.

Table 1 **Outline of 1995 LSAY sample and contact: 1995-2000**

Year	1995	1996	1997	1998	1999	2000
Grade	9	10	11	12	12 + 1	12 + 2
Modal age	14	15	16	17	18	19
Contact	In-school testing & qre	At home mail questionnaire	Telephone interview	Telephone interview	Telephone interview	Telephone interview
Respondents	13613	9837	10307	9738	8783	7889
Response %	100.0	72.3	75.7	71.5	64.5	58.0

Table 2 shows the labour force and educational participation of the respondents at the time of the 2000 interview. Their major activities reflect their age. While the overwhelming majority are employed (78.0%), this is relatively evenly split between full-time (38.5%) and part-time work (38.7%). The most frequent activities are:

- Part-time work and full-time study (25.8%)
- Full-time work and no study (22.3%)
- Full-time work and part-time study (14.4%)
- Not in the labour force and full-time study (9.8%)

For those young people who work but are neither studying full- or part-time, workplace training provides an important potential source of on-going skills development.

The analysis of workplace training is restricted to respondents who are currently employed or who have had a job since their last interview. Consistent with much of the literature on training, the analysis is restricted to respondents who were employed as wage or salary earners. For young people, almost all persons in employment are wage or salary earners. Much of the discussion of workplace training presupposes a firm that provides the training and a worker who receives it.

Table 2 Labour force and educational participation at time of interview: All persons, 2000

	Males %	Females %	Persons %
All respondents	100.0	100.0	100.0
Number of respondents	3718	4171	7889
Employed	78.6	77.4	78.0
Studying full-time	23.0	32.4	27.8
Studying part-time	23.7	12.1	17.8
Not Studying	31.9	32.9	32.4
Full-time	46.3	31.0	38.5
Studying full-time	2.1	1.6	1.9
Studying part-time	21.0	8.1	14.4
Not Studying	23.2	21.4	22.3
Part-time	31.5	45.7	38.7
Studying full-time	20.6	30.7	25.8
Studying part-time	2.6	3.9	3.3
Not Studying	8.2	11.1	9.7
Unemployed	9.5	7.7	8.6
Studying full-time	3.4	3.6	3.5
Studying part-time	0.3	0.5	0.4
Not Studying	5.8	3.6	4.7
Not in the labour force	12.0	14.8	13.4
Studying full-time	9.4	10.2	9.8
Studying part-time	0.8	0.4	0.6
Not Studying	1.8	4.3	3.1
Studying	60.6	59.1	59.8
University	29.3	38.9	34.2
Apprenticeship/Traineeship	20.9	6.5	13.5
Other VET	9.1	11.9	10.5
Other	1.4	1.8	1.6
Full-time	35.7	46.2	41.1
University	27.5	37.0	32.3
Apprenticeship/Traineeship	0.5	0.2	0.4
Other VET	6.8	7.7	7.3
Other	0.9	1.3	1.1
Part-time	24.9	13.0	18.8
University	1.8	1.9	1.9
Apprenticeship/Traineeship	20.4	6.3	13.2
Other VET	2.2	4.2	3.2
Other	0.4	0.5	0.5

2. TRAINING PARTICIPATION AND CHARACTERISTICS

Members of the 2000 LSAY panel were asked an extensive array of questions about their participation in job training, the nature of that training, and outcomes from the training. Table 3 shows the responses to these questions. The results are presented separately for males and females and for the sample overall. The first few lines of the table show that results are for respondents who were either currently employed as wage or salary earners—76.4% of the 2000 sample—or, if not currently employed, had been employed between the current and previous interview—a further 8.7% of the sample. About 85% of respondents in the 2000 panel met at least one of these two criteria.

'Job training' is a fairly nebulous term to use in an interview. As is shown in the table, respondents were prompted with a description that directed them to activities designed to improve job skills and explicitly excluded study for educational qualifications such as apprenticeships or traineeships. Since responses are often dependent on the question asked, Table 3 preserves a substantial amount of the wording for each question.

Table 3 is divided into two panels. The upper panel is based on the full wage and salary earner sample and deals principally with participation in various forms of training. The lower panel deals with the characteristics and outcomes of the training and is based on members of the panel who received some training.

2.1 Participation in Training

Table 3 identifies four forms of training: *in-house* and *external* formal training (where *formal* corresponds to attending classes), *other* training, and *self-teaching.* As well as measures of the *incidence* of training, for the two variants of formal training there are also measures of the *amount* of training in the form of the mean hours of training.

About a quarter (25.3%) of respondents received in-house training, with females (27.3%) slightly more likely to receive in-house training than males (23.2). The average hours of in-house training, however, were higher for males (35.9) who participated in in-house training than for females (30.6). On average, participants in in-house training received a little over four days of training. Participation in external training was substantially lower, but again was higher for females (10.0%) than for males (8.8%). On average, participants received about six days of external training. Male participants received an average of about four more hours of external training than female participants.

Although there is no information on the hours of informal training, the incidence of other training and self-teaching is higher than for either types of formal training—over a third of respondents received some other training (36.7%) and nearly a half taught themselves some skills (48.1%). Just under a third of the 'other' training (11.6%) had some formal aspects because it was delivered by someone whose main job was to provide training for other workers. Males were slightly more likely than females to participate in both 'other' training and self-teaching.

Table 3 Workplace training since last interview—Participation, characteristics and outcomes: Respondents employed as wage or salary earners since last interview, 2000

	Male	Female	Persons
Job training is training designed to improve job skills. It does not include formal study for educational qualifications such as apprenticeships or traineeships			
Respondents currently employed as a wage or salary earner or who had been employed as a wage or salary earner since their last interview			
Currently employed as a wage or salary earner (%)	76.9	76.0	76.4
Had been employed as a wage or salary earner (%)	8.7	8.8	8.7
Total (%)	85.6	84.8	85.2
Number of respondents	3718	4171	7899
IN-HOUSE TRAINING			
As part of job with employer, attended classroom based training or lectures at workplace (%)	23.2	27.3	25.3
Mean hours of in-house training	35.9	30.6	33.0
EXTERNAL TRAINING			
As part of training with employer, attended training classes somewhere else (%)	8.8	10.0	9.4
Mean hours of external training	47.6	43.4	45.3
OTHER TRAINING Received some other kind of job training from other people at work apart from classes (%)	37.1	36.3	36.7
PROVIDER Some training provided by someone whose main job is providing training to other workers (%)	11.1	12.1	11.6
SELF TEACHING In job with employer, some skills had to teach self (%)	49.9	46.3	48.1
SATISFIED WITH OPPORTUNITIES FOR TRAINING (%)			
Very satisfied	31.0	29.6	30.3
Fairly satisfied	46.1	45.4	45.8
Fairly dissatisfied	13.7	15.0	14.4
Very dissatisfied	3.9	3.8	3.8
Don't know	0.7	0.9	0.8
Not applicable	4.6	5.3	5.0
Respondents who received some training (in-house, external, other)			
Received some training (in-house, external, other) (%)	44.6	46.6	45.6
Number of respondents	1704	1955	3659
TYPE OF SKILLS (%)			
Learned new skills, that is, things which were totally new	82.6	76.9	79.6
Added to skills you already had	89.5	91.9	90.8
REASONS FOR TRAINING (%)			
Employer changed the kind of machinery/equipment being used	26.8	28.6	27.7
Change in the kind of work being done	37.1	35.2	36.1
OUTCOMES (%) Job training . . .			
helped get a promotion, pay rise, more responsible position	45.1	38.8	41.8
could help get a promotion, pay rise, more responsible position	36.1	38.3	37.3
could help get a more responsible kind of job, doing the same kind of work, with another employer	88.7	88.5	88.6
could help get a different kind of job somewhere else	81.2	82.8	82.1
AMOUNT (%) In your job, do you think you've had . . .			
too much job training	1.9	2.2	2.1
too little training	16.4	16.4	16.4
about right	81.7	81.3	81.5

See *Notes to Tables*

Respondents in paid employment were asked whether they were satisfied with several aspects of their job, including their opportunities for training. The overwhelming majority was either *very satisfied* (30.3%) or *fairly satisfied* (45.8%) with this aspect of their job. Nevertheless 14.4% were *fairly dissatisfied* and 3.8% were *very dissatisfied* with the training opportunities provided by their job. There was little difference between males and females. The distribution of satisfaction with job opportunities among categories of young workers is discussed in a later chapter of this report.

2.2 Characteristics of Training

The second panel of Table 3 shows several characteristics of training for those respondents who participated in in-house, external or other training. For convenience, this group of respondents is referred to as *trainees*. This usage should not be confused with people enrolled in traineeships.

The characteristics include the reasons for the training, the outcomes (including new or additional skills), and the adequacy of training.

2.2.1 Reasons for training

The sources of demand for training are many and varied. Possibly most important for young workers is job turnover—entering a new job for which current skills are inadequate (Shah *.et al.* 2002). Alternatively, it may not be the worker that changes, but the job. Although respondents may say they are in the same 'job', the tasks required in that job can change—just over a third (36.1%) of trainees reported that their training was in response to changes in the kind of work they were required to do.

New technology is often considered a major source of demand for training of workers. Over a quarter (27.7%) of trainees reported that their training was associated with changes in technology.

There was little difference between male and female trainees in the extent to which their training was prompted by either technology or the kind of work being done.

2.2.2 Outcomes of training

Relatively high percentages of respondents reported that their training provided them with totally new skills (79.6%) or added to skills they already had (90.8%). Males (82.6%) were more likely to learn new skills than females (76.9%) but there was little difference between males and females in the extent to which training added to existing skills.

The importance of access to workplace training is underlined by its role in providing positive outcomes for employment. More than two-fifths of respondents reported that their workplace training had helped them to get a promotion, a pay rise or a more responsible position and nearly a further two-fifths (37.3%) reported that it could help to obtain a promotion, a pay rise or a more responsible position.

Males (45.1%) were more likely to report that the training had helped them to obtain a promotion, pay rise or more responsible position than were females (38.8%). This is despite the fact that males and females were at least equi-likely to judge that the training could help to obtain these outcomes—a result that points to the possible greater efficacy of training for advancement in the labour force for males.

The positive labour market outcomes associated with workplace training suggest that the training is *general*, rather than *specific*, in the sense in which these terms are used in the literature on the economics of education. General training provides skills that are transferable to other firms, while specific training is not useful outside the firm in which it is provided.

The *general* nature of the training received is underlined by respondents' answers to questions about the *transferability* of the training to other employers, either in the same job (88.6%) or in a different job (82.1%). The training appears, in the judgement of the respondents, to be useful beyond their current job with their current employer.

The interest in the general or specific nature of training stems principally from its relationship to the funding of training. If training is specific, then the firm receives the benefit and has an incentive to pay for that training. If the training is general, the employee can receive benefits from it and has an incentive to pay. Unless the firm has other mechanisms for capturing the benefits of training, it has little incentive to pay for general training. Although there are no data available in LSAY on payment for training, it is unlikely that young employees pay directly for access to workplace training. Whether they pay indirectly, by accepting lower wages as suggested by Becker (1964), is an open issue.

2.2.3 Adequacy of training

Respondents who had received training were asked whether they had received too much training, too little, or about the right amount. Relatively few claimed to have received too much training (2.1%), while the majority claimed that they had received the right amount (81.5%). About a sixth (16.4%), however, claimed that they had received too little training. Any differences between males and females were negligible. It is unfortunate that this question (or a parallel question) was not asked of respondents who did not participate in training. The characteristics associated with receipt of too little training are explored in Chapter 5.

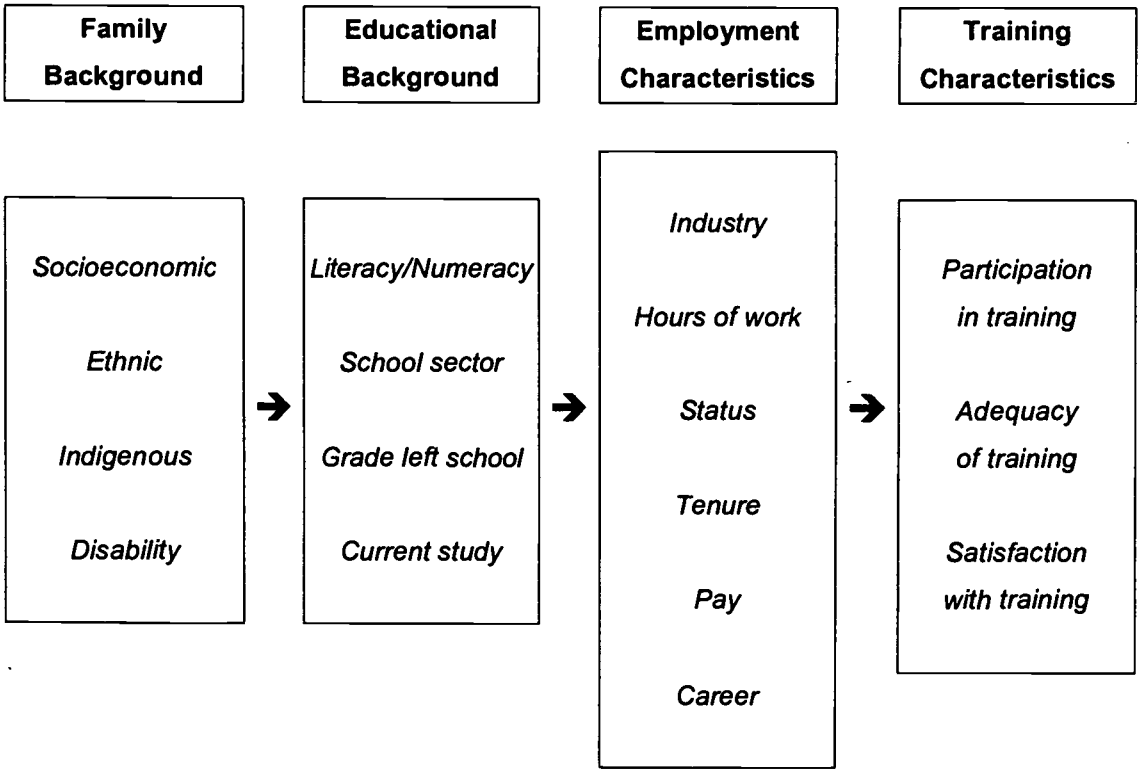
3. EMPLOYEE CHARACTERISTICS

There is justifiable interest in the amount of workplace training and its characteristics. Measures of aggregate training and its characteristics allow the investigation of such questions as whether the total amount and nature of training are changing over time or differ between countries. There is also interest, however, in the way in which any training is distributed among categories of workers. Such analyses not only inform considerations of equity, but also allow inferences about the considerations that influence the provision of workplace education and training.

This chapter discusses the characteristics of employees used to analyse the distribution of training later in this report. The variables available in the LSAY panel include most of those recorded in the literature as influencing the distribution of workplace education and training apart from the size of the firm that employs them. The fact that it is a survey of the transition of young people from school to work means that there is substantially more information available (and more emphasis) on family background characteristics than is often the case with other surveys.

Table 4 lists the variables considered in this chapter and subsequent analyses and provides a schema for the analyses. It identifies three sets of variables: family background, educational background and the characteristics of the current job.

Table 4 Schema of variables considered in the analyses



The schema shows three sets of variable. Family background influences education which influences employment, which influences aspects of training. The distributions of these sets of variables are set out in Tables 5, 6 and 7 respectively. The remainder of this chapter examines each of these sets of variables in turn.

3.1 Family and Personal Background

Educational opportunities and outcomes for young people are often associated with their family background (Lamb, *et al.* 1999; Long, *et al.* 1999). Such relationships might be expected to become more attenuated as students leave their family, their schools and have a more diverse range of experiences in the labour force. Long & Hayden (2001) present some results for higher education that show this process in higher education. It is not clear, however, when such attenuation begins.

Workplace education and training is another, though usually less institutionalised, form of skills formation for young people—particularly for those young people who do not continue with study in the years immediately after leaving school. Given the importance of access to workplace education and training for increased earnings and improved employability, understanding the distribution of workplace education and training among categories of young people may be an important equity issue.

3.1.1 Socioeconomic background

Young people from higher socioeconomic backgrounds generally have better educational opportunities and outcomes—higher rates of Year 12 completion, higher rates of entry to higher education—than young people from lower socioeconomic backgrounds. The word *socioeconomic* combines the *social* and the *economic*. It is customary to distinguish several dimensions of socioeconomic background, including parental occupation and education and family wealth and income (Ainley, *et al.* 1995).

Although the various aspects of family socioeconomic background are usually positively related—education, occupation, income and wealth—they are also distinct, even if not always easily separable or measured. It is sometimes useful to examine the social and the economic separately—to determine, for instance, whether social or economic factors (or both) are the source of any observed unequal outcome. Examining the aspects socioeconomic background separately, however, runs the risk of attributing a small effect to each and failing to identify a combined effect.

A survey such as LSAY that tries to measure family socioeconomic background faces particular problems. Asking children, even children in senior secondary school, about their parents' jobs is not always very enlightening. Unless the job has a well defined title, such as *plumber*, they often cannot provide sufficient detail to permit the *occupation* to be accurately identified. The substantial proportion of mothers who are not in the labour force cannot be classified either.

Whether one or both parents are in paid employment is a cruder, but possibly more reliable measure, of socioeconomic background. Households in which no parent is employed might be expected, on average, to be socioeconomically disadvantaged.

Employment is reasonably current. Formal education for most parents probably finished before their child was born. Asking children about what their parents' did perhaps 20 or more years ago may be asking too much. Hence questions about the *highest level of education* of the father and mother may be testing the limits of the knowledge of their children. Table 5 shows that more than a quarter (26.1%) of students gave no response to this question.

Direct measures of the economic resources of a family are also difficult to obtain, even from adults. Information on parental income is particularly sensitive and children are unlikely to be told or to be able to estimate it. They also lack the experience in the workforce that would provide the context for reasonable estimates. To measure family wealth, however, it is possible to use a proxy based on the presence of various commodities in the home—and that is what is used in this report. Even so, Table 5 shows that there are substantial missing data for this variable.

Four measures of socioeconomic background are used in this report:

- Parents' occupation
- Parents' education
- Parents' employment status
- Family wealth

3.1.1.1 Parents' occupation

For persons currently present in their household, in 1997 respondents were asked *What is/was your father's (step-father's) current/last main occupation?* A corresponding question was asked about the mother or step-mother. The answers were coded using the first edition of the *Australian Standard Classification of Occupations* (ASCO) (ABS, 1999).

A slightly different question was asked in 1995: *What are your parents' jobs? Name their occupations, and describe what they do.* (If your mother and father are not working now, describe their jobs before they stopped working. Please answer this question even if your mother or father doesn't live with you). As with the 1997 question, the responses were coded according to the first edition of ASCO.

ASCO classifies occupations according to their skill level and skill specialisation. The skill level is a function of the range and complexity of the set of tasks involved—the greater the range and complexity of the set of tasks, the greater the skill level of the occupation. Operationally the skill level is measured by the amount of formal education, on-the-job training and previous experience usually necessary for the satisfactory performance of the set of tasks. The skill specialisation of an occupation depends on the field of knowledge required, the tools, equipment and materials used and goods or services provided (ABS, 1999).

ASCO first edition identifies eight major occupational groups:

- Managerial or administrative
- Professional
- Para-professional
- Tradesperson
- Clerical
- Sales, personal service
- Plant operators, drivers
- Labourer

Table 5 Selected background characteristics by gender: Respondents employed as wage or salary earners since last interview, 2000

	Males		Females		Persons	
	%	%	%	%	%	%
Parents' occupation						
Managerial or administrative	9.8	10.0	10.8	11.0	10.3	10.5
Professional	16.3	16.8	16.0	16.3	16.2	16.6
Para-professional	9.6	9.9	10.1	10.3	9.8	10.1
Tradesperson	7.3	7.5	5.9	6.0	6.5	6.7
Clerical	19.9	20.5	21.2	21.7	20.6	21.1
Sales, personal service	17.3	17.8	18.7	19.1	18.0	18.5
Plant operators, drivers	3.4	3.5	2.8	2.8	3.1	3.2
Labourer	13.6	14.0	12.4	12.7	13.0	13.4
Missing	2.9	----	2.1	----	2.5	----
Parents' employment status						
Both parents employed	3.7	3.7	4.3	4.3	4.0	4.0
One parent employed	14.2	14.2	15.0	15.0	14.6	14.6
No parent employed	82.1	82.1	80.7	80.7	81.4	81.4
Missing	0.0	----	0.0	----	0.0	----
Parents' education						
Higher education qual.	25.4	35.3	27.4	36.1	26.4	35.7
Trade/technical qual.	16.3	22.6	13.3	17.6	14.8	20.0
Completed secondary school	15.1	21.0	15.7	20.6	15.4	20.8
Didn't complete sec. school	15.1	21.1	19.5	25.7	17.4	23.5
Missing	28.1	----	24.1	----	26.1	----
Family wealth						
High	9.7	12.2	10.3	11.5	10.0	11.9
Upper middle	30.0	37.7	34.4	38.7	32.2	38.3
Lower middle	30.0	37.7	33.3	37.4	31.6	37.6
Low	9.8	12.3	11.0	12.3	10.4	12.3
Missing	20.6	----	11.2	----	15.8	----
Parents' country of birth						
Both NonEng-speaking country	12.6	13.2	13.9	14.2	13.2	13.7
Both Eng-speaking country	5.3	5.6	4.4	4.5	4.9	5.0
One NonEng-speaking country	8.6	9.0	9.1	9.3	8.8	9.2
One Eng-speaking country	9.8	10.3	9.9	10.2	9.9	10.2
Both born in Australia	59.1	61.9	60.3	61.8	59.7	61.9
Missing	4.5	----	2.4	----	3.5	----
Respondent's country of birth						
Australian born	86.9	90.8	88.6	90.7	87.8	90.7
Born in English-speaking country	2.9	3.0	3.1	3.2	3.0	3.1
Born in nonEng.-speaking country	6.0	6.2	6.0	6.2	6.0	6.2
Missing	4.3	----	2.3	----	3.3	----
Language spoken at home						
English	88.1	92.5	91.1	93.9	89.6	93.2
Other than English	7.2	7.5	5.9	6.1	6.5	6.8
Missing	4.7	----	3.0	----	3.9	----
Indigenous						
Yes	1.8	1.9	1.9	2.0	1.9	2.0
No	90.8	98.1	94.1	98.0	92.5	98.0
Missing	7.4	----	4.0	----	5.7	----
Disability						
Yes	0.8	0.8	0.4	0.4	0.6	0.6
No	99.2	99.2	99.6	99.6	99.4	99.4
Missing	0.0	----	0.0	----	0.0	----

See *Notes to Tables*

The measure of parents' occupation used in this report is based on responses to the 1997 interview. Parents' occupation is the higher of father's or mother's occupation. If occupational information was not available from the 1997 interview, then the corresponding information was used from the 1995 questionnaire.

3.1.1.2 Parents' employment status

In the 1997 interview, respondents were asked about the current labour market participation of any parent or step-parent who was currently living with them. Responses were summarised in the following three categories:

- Both parents employed
- One parent employed
- No parent employed

3.1.1.3 Parents' education

In 1995 students were asked about their father's and mother's highest level of education. The alternatives were:

- No secondary school
- Some secondary school
- All years of secondary school
- Trade/technical qualification
- Degree or diploma
- Don't know

Parents' education is the higher of father's or mother's education. In the tables these are presented as:

- Higher education qualification
- Trade or technical qualification
- Completed secondary school
- Didn't complete secondary school

3.1.1.4 Family wealth

The 1996 questionnaire asked if students had the following items in their home:

- Washing machine
- Dishwasher
- Mobile phone
- CD player
- Video camera
- Colour TV
- Microwave oven
- Computer
- Piano
- Swimming pool

The family wealth measure in this report is a simple summative scale that runs from zero (if respondents indicated that they had none of these items in their home) to ten (if respondents indicated that all of these ten items were present). For presentation in the tables, the scale was then categorised as:

- High (9-10 items)
- Upper middle (7-8 items)
- Lower middle (5-6 items)
- Low (0-4 items)

3.1.2 Ethnic background

Participation in education and training provides the potential for the inclusion of persons who recently migrated to Australia. There has been considerable concern to see that young people are not educationally disadvantaged because of their ethnic background. School-based programs and funding arrangements that address educational inequality have been largely successful—students from non-English speaking backgrounds on average have higher rates of Year 12 completion and entry to higher education (Lamb, *et al.* 1999; Long, *et al.* 1999). There remains, however, substantial variation in educational participation and outcomes among ethnic groups. Participation in work-based training, however, appears to be well below average (McKenzie & Long, 1996; Baker & Wooden, 1991).

This report uses several measures of ethnic background, principally centred on country of birth. Three categories are identified—Australian-born, Born in a predominantly English-speaking country other than Australia, and Born in a country in which English is not a main language. While these three categories do not capture the full diversity of ethnic background, they do distinguish between possible effects of migrancy per se and possible additional English language problems. The inclusion of such measures for both parents and the respondent allows generational differences to be detected. Additionally, there is a measure that reports whether English or another language is mostly spoken in the home.

3.1.2.1 Parents' country of birth

The country of birth of the mother and father of the respondent was initially categorised as either Australian-born, born in a predominantly English-speaking country, or born in some other country. These were then combined to form the following categories:

- Both parents born in a predominantly nonEnglish-speaking country
- Both parents born in a predominantly English-speaking country (other than Australia)
- One parent born in a predominantly nonEnglish-speaking country
- One parent born in a predominantly English-speaking country (other than Australia)
- Both parents born in Australia

The categories are arranged in descending priority, so that, for instance, a respondent with one parent born in a predominantly nonEnglish speaking country and the other parent born in a predominantly English-speaking country is in the third category. Where information was available for only one parent, it was assumed that both parents were in the same category.

3.1.2.2 Respondent's country of birth

The respondent's country of birth is categorised as *Australia, predominantly English-speaking country other than Australia*, and *a not predominantly English-speaking country.*

3.1.2.3 Language spoken at home

The 1995 questionnaire asked students how often they spoke English at home. The responses were *Always or almost always*; *Sometimes*; and *Rarely or never*. The first response was classified as *English*, while the latter two were described as *Other than English.*

3.1.3 Indigenous background

Educational participation by Aboriginal and Torres Strait Island persons is substantially below that of the general population. Given the markedly different age-profile of the Indigenous population—more than a decade younger than the general population—analyses that are not age-specific sometimes fail to find a difference or understate differences that exist because the Indigenous population is over-represented among younger people where educational participation is generally older. Nationally, Indigenous students have lower levels of completion of Year 12, lower participation in higher education, lower levels of completion of higher education courses, lower levels of participation in higher level higher education courses, about proportional participation in vocational education and training courses, lower levels of participation in higher level VET courses, and lower labour market outcomes from educational qualifications (Long, *et al.* 1999). Appropriate information on workplace education and training is scarce, but participation by Indigenous employees appears to be lower than in the wider population (ABS 2001).

The analysis of data by Indigenous status is often a problem for omnibus surveys such as LSAY. Indigenous people are a small proportion of the population—Table 5 shows that they are 1.9% of the sample. Thus surveys, unless they have very large samples, include relatively few Indigenous people. Hence few relationships involving Indigenous status are statistically significant. A decision to exclude analyses of Indigenous status on this basis would mean that few results were ever reported for Aboriginal and Torres Strait Islander people.

The initial LSAY sample was of students in Year 9 in school. The low levels of school retention of Indigenous students, their higher levels of absenteeism, and the sometimes unorthodox grade-level arrangements in students with predominantly Indigenous students mean that some categories of Indigenous student have a low probability of inclusion in the initial sample. This is possibly compounded by the use of telephone interviewing for subsequent contact.

Self-identification of Indigenous status is a widely accepted measure. There are, however, problems with this approach, especially among young people. In any survey of school students, a substantial proportion of self-identified Indigenous students will have parents who were born outside Australia, will themselves have been born outside Australia, and will speak a non-Aboriginal language other than English at home. While such answers are not impossible, their relative frequency raises the suspicion that the question *Are you an Aboriginal person or a Torres Strait Islander person*? Yes/No creates some confusion for some persons born outside Australia. The responses used in this study have been carefully verified against country of birth and language variables.

3.1.4 Disability

People with disabilities are often among the most educationally disadvantaged (ANTA, 2000a; 2000b). This disadvantage extends into the labour force. There is relatively little information about access to workplace education and training by persons with disabilities. The measure of disability used in this study is based on responses to two questions:

In the 1997 survey, respondents were asked:

> *Do you have a disability for which you receive special funding or access to special services?*

and the 1995 questionnaire asked:

> *Do you have a disability which entitles you to receive special funding or access to special education support services?*

Any respondent who answered *yes* to either question was classified as disabled. This definition is deliberately narrow. As a consequence, as with Indigenous respondents, relatively few respondents (0.6% in Table 5) are classified as disabled. Hence few relationships are statistically significant. Nevertheless, the relationships are reported here because if the likelihood of finding statistical significance were the sole criterion, few results would ever be published on the participation in education and training of people with disabilities.

3.2 Educational Background

The literature on workplace education and training repeats the finding that *education and training are not substitutes, they are complements*. It is not workers with lower levels of education who receive more training in a firm—it is those with higher levels of education who are more likely to participate in workplace training. Education and training within the firm are not a 'top-up' to compensate for lower initial levels of training. Instead they build on that prior education (Long, *et al.* 2000).

The link between prior educational qualifications and participation in workplace education and training is over and above any relationship associated with other factors such as occupation, age, industry, or hours of work. It may reflect lower training costs of workers with higher educational qualifications (they may learn more quickly or more thoroughly) or other (unmeasured) personal characteristics associated with both educational qualifications and selection for training.

Young people who are in the main only two or three years out of school do not have any great range of post-school qualifications. Students studying for degrees, diplomas and apprenticeships typically will not have had time to complete their qualification. Although we can identify those students who have completed a certificate or qualification of some kind, there are several other measures of their educational background: their literacy and numeracy, the grade-level at which they left school, and their current enrolment for study.

Table 6 Selected educational characteristics by gender: Respondents employed as wage or salary earners since last interview, 2000

	Males		Females		Persons	
	%	%	%	%	%	%
Literacy & numeracy						
Highest quartile	27.0	27.1	23.5	23.6	25.2	25.3
Upper middle quartile	22.5	22.6	26.4	26.4	24.5	24.6
Lower middle quartile	23.7	23.8	26.7	26.7	25.2	25.3
Lowest quartile	26.4	26.5	23.3	23.3	24.8	24.9
Missing	0.4	----	0.2	----	0.3	----
Type of school						
Government	69.3	69.3	67.2	67.2	68.2	68.2
Catholic	18.3	18.3	21.3	21.3	19.9	19.9
Other	12.4	12.4	11.5	11.5	11.9	11.9
Missing	0.0	----	0.0	----	0.0	----
Grade left school						
Year 12	76.9	76.9	85.8	85.8	81.4	81.4
Year 11	13.2	13.2	8.0	8.0	10.6	10.6
Year 10 or 9	9.9	9.9	6.2	6.2	8.0	8.0
Missing	0.0	----	0.0	----	0.0	----
Post-school qualification						
Yes	25.0	25.0	26.9	26.9	26.0	26.0
No	75.0	75.0	73.1	73.1	74.0	74.0
Missing	0.0	----	0.0	----	0.0	----
Study in 2000						
Full-time study	30.2	30.2	42.5	42.5	36.5	36.5
Part-time study	5.2	5.2	7.1	7.1	6.1	6.1
Apprenticeship	18.8	18.8	2.2	2.2	10.4	10.4
Traineeship	3.9	3.9	5.0	5.0	4.5	4.5
None	41.9	41.9	43.2	43.2	42.5	42.5
Missing	0.0	----	0.0	----	0.0	----

See *Notes to Tables*

3.2.1 Literacy and numeracy

When members of the sample were initially contacted in their schools in 1995 when they were in Year 9, they completed two multiple-choice tests each of 20 items. One was a test of reading comprehension and the other tested numeracy and quantitative thinking skills. The scores (corrected for guessing) from these two tests were normalised and combined into a single measure. The combined scores were then divided into quartiles and it is results for the quartiles that are reported in the tables in this report.

3.2.2 Grade left school

The number of years of schooling is a basic measure of school performance. School completion is an important correlate of later educational and labour market outcomes (Long, *et al.* 1997). In particular, students who leave school before Year 12 and undertake no alternative study are generally disadvantaged in the longer term.

The tables distinguish *Year 12*, *Year 11*, and *Years 10 or 9*. These categories do not necessarily indicate satisfactory completion of the corresponding grade level. They simply indicate that the respondent had remained at school in that grade-level until at least September.

3.2.3 Qualifications

Given the age of the sample, relatively few students will have had the opportunity to complete a qualification since leaving school. Those that have are recognised by the qualification variable. No attempt has been made to distinguish the type of qualification, but the majority are VET Certificates, principally Certificate 2.

3.2.4 Current study

Many students are studying while they are working (or, perhaps more correctly, working while they are studying). Study is not only a reflection of educational achievement, but often indicates the importance of the job to the student and their future. Students in full-time study are more likely to be working temporarily in jobs to support their study. Employers may be less likely to invest in the workplace education and training of such temporary workers. The following categories of study at the time of interview are distinguished in the analysis:

- Full-time study
- Part-time study
- Apprenticeship
- Traineeship
- None

Table 6 shows that 42.5% of young wage and salary earners were not enrolled for any form of study in 2000. For these young people, the workplace provides their main potential opportunity for developing work skills.

3.3 Employment Characteristics

The job and the nature of employment in the job are likely to be major determinants of the need for job training—some jobs need more training than others. Most of the major job characteristics that are major drivers of demand for training are captured except for the size of the firm. Additionally, and importantly for such a young sample, information is available on whether or not the job is the kind of job the respondent would like to have as a career. The measured job characteristics are:

- Occupation
- Industry
- Hours per week
- Permanent/casual status
- Tenure in job
- Gross weekly pay
- Whether the job is a career

Table 7 **Selected employment characteristics by gender: Respondents employed as wage or salary earners since last interview, 2000**

	Males		Females		Persons	
	%	%	%	%	%	%
Occupation						
Managerial & administrative	0.6	0.6	0.6	0.6	0.6	0.6
Professional	3.2	3.2	3.5	3.5	3.4	3.4
Associate professional	8.7	8.8	7.1	7.1	7.9	7.9
Tradesperson	27.0	27.2	3.7	3.7	15.2	15.3
Advanced clerical, service	0.4	0.4	3.5	3.5	2.0	2.0
Intermediate clerical, sales service	12.5	12.6	35.6	35.7	24.2	24.4
Intermediate production, transport	8.4	8.5	1.6	1.6	5.0	5.0
Elementary clerical, sales service	17.3	17.4	33.5	33.7	25.6	25.7
Labourers & related	21.1	21.2	10.4	10.4	15.6	15.7
Missing	0.7	----	0.4	----	0.6	----
Industry						
Primary industry	5.2	5.3	2.2	2.3	3.7	3.7
Manufacturing & utilities	10.9	10.9	3.9	3.9	7.3	7.4
Housing	12.5	12.6	1.1	1.1	6.7	6.7
Retail & wholesale	32.2	32.4	36.1	36.2	34.2	34.3
Accommodat'n, cafes, restaurants	11.4	11.4	15.0	15.1	13.2	13.3
Transport, storage, communicat'n	3.4	3.4	2.9	2.9	3.1	3.2
Finance, property, bus. services	11.8	11.9	13.5	13.6	12.7	12.8
Government admin, defence	1.9	2.0	1.8	1.8	1.9	1.9
Health, educat'n, community serv.	3.6	3.6	12.2	12.2	7.9	8.0
Recreation, personal services	6.5	6.6	11.0	11.0	8.8	8.8
Missing	0.5	.	0.3	.	0.4	.
Hours per week						
1-10	11.7	12.0	17.9	18.6	14.9	15.3
11-20	17.0	17.5	24.7	25.6	20.9	21.6
21-30	8.9	9.2	12.7	13.2	10.9	11.2
31-40	40.2	41.3	33.8	35.0	37.0	38.1
41 or more	19.5	20.0	7.4	7.7	13.4	13.8
Missing	2.7	----	3.4	----	3.0	----
Status						
Permanent	47.6	53.9	37.4	42.2	42.4	47.9
Casual	40.6	46.1	51.2	57.8	46.0	52.1
Missing	11.8	----	11.3	----	11.6	----
Tenure in job						
Less than 6 months	10.2	11.7	11.8	13.3	11.0	12.5
6 - 12 months	17.5	20.0	21.1	23.8	19.3	22.0
13-24 months	36.7	41.9	36.2	40.9	36.4	41.4
More than 24 months	23.1	26.4	19.4	21.9	21.2	24.1
Missing	12.5	----	11.6	----	12.0	----
Gross weekly pay						
$100 or less	9.4	10.4	14.0	15.6	11.7	13.1
$101-$200	13.9	15.5	22.6	25.4	18.4	20.5
$201-$300	16.6	18.5	16.4	18.4	16.5	18.5
$301-$400	17.7	19.7	17.7	19.8	17.7	19.7
$401-$500	15.1	16.8	11.1	12.4	13.0	14.5
More than $500	17.2	19.1	7.5	8.4	12.2	13.7
Missing	10.2	----	10.8	----	10.5	----
Job is a career						
Yes	36.8	41.7	25.5	28.7	31.0	35.1
No, don't know	51.4	58.3	63.2	71.3	57.4	64.9
Missing	11.8	----	11.3	----	11.6	----

See *Notes to Tables*

3.3.1 Occupation

Occupation in 2000 was coded using the second edition of ASCO. Comparison with the categories for parents' occupation suggests the substantial differences between the first and second versions of ASCO. The rationale underlying the two schemas, however, is similar—it is based on the skill requirements of the job. The nine occupational categories correspond to five skill levels:

Occupation	Skill	Occupation	Skill
Managerial & administrative	1	*Intermediate clerical, sales service*	4
Professional	1	*Intermediate production, transport*	4
Associate professional	2	*Elementary clerical, sales service*	5
Tradesperson	3	*Labourers & related workers*	5
Advanced clerical, service	3		

Table 7 shows (as might be expected for such a young sample) that relatively few are employed as *Managers or administrators* (0.6%) or *Professionals* (3.4%). The majority of the sample is employed as *Elementary clerical, sales or service workers* (25.7%), *Intermediate clerical, sales and service workers* (24.4%), or as *Labourers* (15.7%). There is a distinct gender difference. Males are substantially more likely to be *Tradespersons* (27.2%) or *Labourers* (21.2%) than are females, while females are substantially more likely to be *Elementary clerical, sales or service workers* (33.7%), *Intermediate clerical, sales and service workers* (35.7%) than are males.

3.3.2 Industry

Similar occupations in different industries may have different training requirements because of differences in the level of competition, profitability, industrial relations, technological change and organisational change, among others. Hence the analyses in this report include the industry in which the respondent is working The industry of the employer is categorised using the *Australian and New Zealand Industry Classification* (ANZIC). Because of the relatively large number of categories at the first digit level, several categories have been combined. The groupings are indicated by the descriptive titles in the tables.

Table 7 shows that the *Retail and wholesale* industries are large employers of young Australians (34.3%) followed by the *Accommodation, cafes and restaurant* (13.3%) and *Finance, property and business services* (12.8%) sectors. There are substantial gender difference, with males more likely to be employed in the *Housing* and *Manufacturing* sectors than females and females more likely to be employed in *Health, education and community services* and in *Recreation and personal services*.

3.3.3 Hours of employment

There are compelling reasons to believe that a part-time worker should receive as much workplace training as a full-time worker in the same job. It is, after all, the job that determines the training needs. The hours of work, however, influence the returns an employer (and an employee) can receive from a given investment in

training. For a given amount of training, the returns are higher (other things equal) the greater the number of hours the employee uses that training. Overwhelmingly research has found that this effect is stronger than the 'job effect'—full-time workers are more likely to participate in workplace training and for longer than are part-time workers.

Table 7 shows that nearly half of the employees are part-time (30 hours per week or less). Females are more likely to be employed part-time (57.4%) than are males (38.7%).

3.3.4 Permanent/casual status

Employment arrangements in Australia and elsewhere have long distinguished between permanent workers, who are entitled to annual leave, sick leave, long-service leave and superannuation, and casual workers, who are not eligible for these benefits. Casual workers usually receive a salary loading in place of these benefits.

Survey respondents employed as wage or salary earners were classified as permanent or casual employees on the basis of their response to the question *Does your job entitle you to any form of paid annual leave or sick leave, apart from public holidays?* The few respondents who did not know were classified as casual employees. Unfortunately in LSAY this question is asked only of respondents who are currently employed as wage or salary workers. It is not asked of persons not currently employed but for whom there is information about their training in their most recent job since last interview.

Again while the nature of the job might determine the skills required, the employment relationship has a substantial effect on the provision of workplace training. Investment in the training of casual workers runs a higher risk of being lost because the worker leaves the firm—by definition, they are not 'permanent'. Hence the returns to training casual workers is likely to be lower than the returns to training permanent workers. The nature of the employment contract means that casual workers are less likely to participate in workplace education and training. A substantial body of research supports this expectation.

Nearly half of the employees are permanent (47.9%) with males more likely to be in permanent employment (53.9%) than females (42.2%).

3.3.5 Tenure in job

There are countervailing influences that link the length of time a worker has been in a job to the likelihood of their participation in workplace education and training. On the one hand, workers are likely to need initial training when they join a firm (Greenhalgh & Mavrotas, 1994), so the longer a worker has been employed, the more likely they are to already have received appropriate training and hence the less likely they may be to receive further training. On the other, the longer a worker is with a firm, the less likely he or she may be to leave. If employers use tenure as a proxy for 'likelihood of leaving', then they may focus their training effort on workers with longer tenure (Loewenstein & Spletzer, 1997).

3.3.6 Earnings

Employees on higher salaries are more likely to participate in workplace education and training. Some part of this relationship may reflect a causal effect of training on earnings, but some part may also reflect a greater efficacy of workplace education and training on workers with higher salaries. Given that wages are a major cost in the training of employees, the training of more highly paid employees is more expensive. The returns to employers must be substantially higher in absolute terms to even maintain a similar level of return to training as that generated by lower paid workers. If, as is implied by the higher rate of training of more highly paid workers, the training of more highly paid workers has even higher returns, then the absolute returns must be larger still.

Differences in the returns to training, however, may not be the sole source of the link between earnings and training. More highly paid workers may simply have more authority within a firm and hence better access to training for themselves—regardless of the training needs of other workers or the efficiency of the allocation of training funds.

Employees in the survey were asked how often they were paid and for their gross salary for this period. The tables present results for seven broad bands of gross weekly earnings.

3.3.7 Career

Respondents who were currently employed were asked *Is the job you have now the kind of job you would like as a career?* In much the same way as the permanent/ casual work division and tenure effect training provision, it might be expected that workers who intend to make a career in their current job will be more likely to receive workplace education and training than workers who consider their current job as temporary.

As with hours of employment and job status, Table 7 shows that fewer young female workers (28.7%) than male workers (41.7%) think of their job as the kind of job they would like as a career.

4. PATTERNS OF PARTICIPATION IN TRAINING

Tables 8, 9 and 10 show the incidence of participation in formal training by personal and family background, educational background and occupational characteristics respectively. Each table shows the incidence of participation in in-house and external training separately, as well as participation in either form. These values, in turn, are shown for males and females separately, and for all persons.

The values in italics in rows next to the headings in bold are weighted least squares estimates of the probability of their being no relationship between the particular variable and the corresponding type of relationship. Low values (say less than 0.050) are consistent with their being a relationship, progressively higher value correspond to a higher probability that the values reported in the table are due to chance.

4.1 Family and Personal Background

Table 8 shows the incidence of participation in formal training for selected personal and family background characteristics—socioeconomic, ethnic, indigenous and disability.

4.1.1 Socioeconomic background

Four characteristics tap aspects of the socioeconomic background of the student: parents' occupation, parents' employment status, parents' education and family wealth. While there are particular relationships that are statistically significant, there is little consistent evidence that would support a simple conclusion like 'young workers from lower socioeconomic backgrounds are less likely to participate in workplace formal training'. There are some indications that this may be the case for male respondents, but very little for female respondents:

- In-house training for males appears to be lower for respondents whose parents were in the lower two occupational categories and for respondents who came from poorer families. Male respondents who came from a family in which neither parent was employed, however, were more likely to participate in in-house training.
- For males, the pattern of receipt of external training was consistent with the proposition that respondents from lower socioeconomic backgrounds were less likely to participate. Family wealth, however, showed no relationship with participation in in-house training.
- There was no consistent evidence for female respondents that family socioeconomic background affected participation in either in-house or external training.

4.1.2 Ethnic background

There are three measures that bear on ethnic background: the country of birth of parents, the country of birth of respondents, and the frequency with which English is spoken at home. Relatively few of the relationships are statistically significant. Those that are, and the general pattern of the other relationships, suggest that

respondents from a non-English background are less likely to participate in formal training in the labour market than respondents from an English-speaking background.

4.1.3 Indigenous background

None of the relationships is statistically significant. As suggested in Chapter 3, the relatively small number of Indigenous respondents means that it is unlikely that these relationships would be statistically significant.

4.1.4 Disability

The pattern of relationships suggests that young workers with disabilities are less likely to participate in formal training than young workers without disabilities. The results for males and females for participation in any formal training show that workers without a disability are about twice as likely to participate in formal training as workers with a disability. The results for female workers in particular show very large differences in rates of participation.

4.2 Educational Background

Results for five measures of educational background are provided in Table 9: literacy and numeracy, type of school, grade left school, achievement of a post-school qualification and current study status. Given the consistent finding reported in the literature that higher formal educational qualifications are associated with a higher incidence of formal training, we expect to find that relationship in these data as well (Long *et al.* 2000, p. 37). To a considerable extent, the results in Table 9 are consistent with the broader finding. The relationship, however, is consistently stronger for participation in in-house training by male respondents. Relationships for external training and for female respondents are frequently weaker and not statistically significant.

Literacy and numeracy are not systematically or uniformly related to the incidence of training. For males, respondents from the lowest quartile of literacy and numeracy are least likely to receive in-house and formal workplace training. This relationship carries through to the results for all persons. There are, however, no statistically significant relationships for female respondents or for external training.

Remarkably, and somewhat inexplicably, respondents who were enrolled in Catholic schools in Year 9 are more likely to participate in formal workplace education and training than are respondents who were enrolled in either government or independent schools. While the values are reasonably consistent, the major source for the difference is the relationship between school type and in-house formal training for male respondents. Few of the other differences are statistically significant.

Respondents who left school in Year 12 are more likely to participate in formal workplace education and training than other students. Again, though, most of the differences derive from the higher likelihood of male respondents to participate in in-house training. The relationships that do not include this group are not statistically significant—although they often show a similar pattern.

Table 8 Participation in in-house and external training by selected background characteristics: Respondents employed as wage or salary earners since last interview, 2000

	Male			Female			Persons		
	In-hse	Extern.	Any	In-hse	Extern.	Any	In-hse	Extern.	Any
	%	%	%	%	%	%	%	%	%
All persons	23.2	8.8	28.4	27.3	10.0	33.3	25.3	9.4	30.9
Parents' occupation	*0.038*	*0.002*	*0.001*	*0.298*	*0.349*	*0.087*	*0.011*	*0.065*	*0.000*
Managerial or administrative	22.5	10.7	29.3	27.4	10.9	32.2	25.1	10.8	30.9
Professional	23.8	11.4	29.9	26.4	9.2	31.0	25.1	10.3	30.4
Para-professional	25.7	10.9	32.8	32.1	11.8	40.3	29.0	11.4	36.7
Tradesperson	18.9	6.6	21.7	27.0	10.6	32.4	22.6	8.4	26.6
Clerical	26.9	8.1	31.5	27.1	11.2	34.2	27.0	9.7	32.9
Sales, personal service	24.6	10.3	30.6	28.2	7.6	33.3	26.5	8.9	32.1
Plant operators, drivers	20.8	4.8	23.0	19.9	9.3	26.7	20.4	6.8	24.7
Labourer	18.4	4.5	21.8	25.3	10.1	31.7	21.8	7.2	26.6
Parents' education	*0.232*	*0.013*	*0.056*	*0.084*	*0.057*	*0.197*	*0.013*	*0.006*	*0.010*
Higher education qual.	26.5	10.9	32.7	30.3	10.1	35.8	28.5	10.5	34.3
Trade/technical qual.	23.0	9.9	27.8	27.7	13.6	34.7	25.2	11.6	31.0
Completed secondary school	22.0	7.1	26.2	24.2	9.3	30.5	23.1	8.2	28.4
Didn't complete sec. school	23.5	6.4	28.7	27.5	9.1	33.4	25.8	7.9	31.3
Parents' employment status	*0.018*	*0.025*	*0.096*	*0.467*	*0.071*	*0.071*	*0.068*	*0.002*	*0.024*
Both parents employed	16.6	14.3	27.2	29.8	12.8	40.0	23.8	13.5	34.2
One parent employed	19.3	6.6	24.2	25.4	7.5	30.3	22.5	7.1	27.4
No parent employed	24.2	8.9	29.1	27.6	10.3	33.5	25.9	9.6	31.3
Family wealth	*0.000*	*0.629*	*0.002*	*0.261*	*0.428*	*0.327*	*0.008*	*0.281*	*0.006*
High	26.1	9.4	31.3	23.2	11.9	30.6	24.6	10.7	30.9
Upper middle	26.6	9.3	31.8	28.4	10.7	34.9	27.6	10.1	33.5
Lower middle	20.4	7.8	25.0	27.3	9.4	32.5	24.1	8.7	29.1
Low	17.0	9.2	24.5	26.6	9.2	31.8	22.1	9.2	28.4
Parents' country of birth	*0.047*	*0.237*	*0.114*	*0.639*	*0.017*	*0.161*	*0.227*	*0.005*	*0.202*
Both NonEng-speaking country	19.6	7.7	24.5	27.4	7.4	32.8	23.8	7.5	28.9
Both Eng-speaking country	20.6	5.2	24.5	25.6	7.9	30.3	22.9	6.5	27.2
One NonEng-speaking country	29.4	7.8	32.3	27.2	6.8	30.9	28.3	7.3	31.6
One Eng-speaking country	22.5	8.4	27.3	30.9	12.2	38.9	26.8	10.4	33.2
Both born in Australia	23.4	9.7	29.4	27.1	10.9	33.1	25.3	10.3	31.3
Respondent's country of birth	*0.906*	*0.139*	*0.895*	*0.132*	*0.630*	*0.072*	*0.508*	*0.155*	*0.152*
Australian born	23.2	9.2	28.7	27.8	10.1	33.7	25.6	9.7	31.3
Born in English-speaking country	25.2	3.5	26.6	19.5	7.5	23.2	22.2	5.6	24.8
Born in nonEng.-speaking country	23.3	7.6	27.9	25.6	10.8	33.6	24.5	9.3	30.8
Language spoken at home	*0.010*	*0.380*	*0.006*	*0.852*	*0.849*	*0.613*	*0.036*	*0.414*	*0.014*
English	23.7	9.1	29.1	27.2	10.1	33.4	25.6	9.6	31.3
Other than English	16.3	7.3	20.6	26.7	9.7	31.7	21.1	8.4	25.7
Indigenous	*0.202*	*0.305*	*0.273*	*0.511*	*0.108*	*0.154*	*0.709*	*0.069*	*0.760*
Yes	16.1	12.5	21.9	30.8	15.9	41.3	23.9	14.3	32.2
No	23.4	8.9	28.6	27.2	10.0	33.1	25.4	9.5	30.9
Disability	*0.955*	*0.320*	*0.533*	*0.039*	*0.206*	*0.015*	*0.170*	*0.112*	*0.040*
Yes	22.7	3.1	22.7	3.0	0.0	3.0	15.8	2.0	15.8
No	23.2	8.8	28.4	27.4	10.0	33.4	25.4	9.5	31.0

See *Notes to Tables*

Table 9 Participation in in-house and external training by selected educational characteristics: Respondents employed as wage or salary earners since last interview, 2000

	Male			Female			Persons		
	In-hse	Extern.	Any	In-hse	Extern.	Any	In-hse	Extern.	Any
	%	%	%	%	%	%	%	%	%
All persons	23.2	8.8	28.4	27.3	10.0	33.3	25.3	9.4	30.9
Literacy & numeracy	*0.001*	*0.691*	*0.006*	*0.246*	*0.189*	*0.177*	*0.001*	*0.162*	*0.002*
Highest quartile	25.3	9.4	30.4	26.2	10.5	31.9	25.8	9.9	31.1
Upper middle quartile	26.2	9.2	31.9	28.4	11.4	34.8	27.4	10.5	33.6
Lower middle quartile	23.3	7.8	27.1	29.1	9.4	35.0	26.3	8.7	31.3
Lowest quartile	18.4	8.7	24.6	25.3	8.5	31.0	21.6	8.6	27.5
Type of school	*0.000*	*0.123*	*0.000*	*0.419*	*0.929*	*0.616*	*0.000*	*0.432*	*0.000*
Government	21.3	8.2	26.4	26.7	10.1	32.9	24.0	9.2	29.7
Catholic	30.7	10.9	35.9	29.1	9.8	34.7	29.8	10.3	35.3
Other	22.4	8.7	27.7	27.7	9.6	33.0	24.9	9.1	30.2
Grade left school	*0.002*	*0.984*	*0.029*	*0.187*	*0.781*	*0.438*	*0.000*	*0.860*	*0.003*
Year 12	24.7	8.8	29.5	27.9	10.1	33.7	26.4	9.5	31.8
Year 11	19.7	8.7	25.4	23.6	9.8	31.8	21.1	9.1	27.7
Year 10 or 9	17.1	9.1	23.6	24.3	8.6	29.7	19.7	8.9	25.9
Post-school qualification	*0.002*	*0.004*	*0.000*	*0.094*	*0.000*	*0.006*	*0.001*	*0.000*	*0.000*
Yes	27.2	11.2	34.2	29.3	13.4	36.8	28.3	12.3	35.6
No	21.8	7.9	26.3	26.6	8.7	31.9	24.2	8.3	29.1
Study in 2000	*0.000*	*0.000*	*0.000*	*0.712*	*0.000*	*0.003*	*0.000*	*0.000*	*0.000*
Full-time study	22.4	6.2	25.7	26.6	6.6	30.6	24.9	6.4	28.6
Part-time study	39.1	19.4	46.3	26.0	14.1	34.7	31.4	16.3	39.5
Apprenticeship	21.6	13.0	30.6	30.6	25.3	48.1	22.6	14.4	32.5
Traineeship	37.3	13.2	43.0	30.6	17.9	38.4	33.4	15.9	40.4
None	21.2	7.0	25.7	27.7	11.0	34.3	24.6	9.1	30.2

See *Notes to Tables*

Respondents who have completed a qualification since leaving school are more likely to have participated in workplace formal training. The relationships are consistent for males and females and for in-house and external training. The only exception is that the difference for in-house training for female respondents is not statistically significant.

For males, respondents studying part-time are more likely to participate in formal workplace training than other students, while for females, respondents enrolled in apprenticeships or traineeships are more likely to participate in training. Full-time students, for whom their job may be temporary, and workers not studying at all are least likely to receive workplace formal training.

4.3 Employment Characteristics

Job characteristics are likely to be more closely related to training than family or educational background—and this is what Table 10 shows. Two characteristics associated with the permanence of the employee-employer relationship, the status and whether the job is a career or not, show consistently that the stronger the relationship between the employee and the employer, the more likely the employer is to provide education and training for the employee. Tenure, however, is less consistently related to training provision. Shorter tenure (less six months) is associated with lower rates of training, especially for external training, but for in-house training, longer tenure (more than two years) is also associated with lower rates of training. So a longer employer-employee relationship is not necessarily associated uniformly with higher rates of training provision.

Occupation is typically related to participation in training. The literature strongly shows that workers in higher status, higher skilled jobs, receive more training than workers in lower status, less skilled jobs (Long et al. 2000, p. 43). The results in Table 10 are reasonably consistent with this pattern, especially for external training. It needs to be recalled from Table 7 that some of the occupational categories have very small sable sizes, so some exceptions are to be expected.

There is substantial variation in training provision across industries. *Government administration and defence* (and the public sector more generally) typically has higher levels of provision of workplace training than other industries. In Table 10 the greater provision of training in *Government administration and defence* (60.0%) is evident for in-house training, external training and overall formal training, as well as for males and females separately. There is relatively little difference in training provision among several industries at the lower end of the scale of provision: *Primary industry* (21.7%), *Manufacturing and utilities* (22.3%), *Housing* (22.3%) and *Accommodation, cafes and restaurants* (24.8%). The *Retail and wholesale* sector is a little higher (29.6%). Training provision in the service industries and transport are markedly higher. The largest gender difference in training provision is in the *Health, education and community services* industry—the rate for females (43.5%) is nearly double that for males (26.3%).

Table 10 Participation in in-house and external training by selected employment characteristics: Respondents employed as wage or salary earners since last interview, 2000

	Male			Female			Persons		
	In-hse	Extern.	Any	In-hse	Extern.	Any	In-hse	Extern.	Any
	%	%	%	%	%	%	%	%	%
All persons	23.2	8.8	28.4	27.3	10.0	33.3	25.3	9.4	30.9
Occupation	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*
Managerial & administrative	34.6	28.8	44.4	50.8	18.5	57.2	42.9	23.5	51.0
Professional	26.9	17.6	34.1	32.4	20.5	42.0	29.8	19.1	38.3
Associate professional	35.6	12.1	41.5	35.3	16.7	46.6	35.4	14.2	43.8
Tradesperson	20.7	11.7	28.7	20.8	19.2	33.2	20.7	12.7	29.3
Advanced clerical, service	37.2	2.9	40.2	32.4	15.5	42.9	32.9	14.3	42.6
Intermediate clerical, sales service	27.7	8.3	32.2	27.6	10.7	33.6	27.7	10.1	33.2
Intermediate production, transport	23.2	6.9	27.5	30.0	9.4	38.0	24.4	7.3	29.3
Elementary clerical, sales service	26.3	8.1	30.3	27.8	6.9	31.9	27.3	7.3	31.4
Labourers & related	15.0	3.7	17.7	16.5	4.1	19.7	15.5	3.8	18.4
Industry	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*
Primary industry	14.1	10.7	22.4	16.9	6.8	19.9	15.0	9.5	21.7
Manufacturing & utilities	18.8	8.2	23.8	12.4	6.4	18.3	17.1	7.7	22.3
Housing	15.4	8.5	21.7	12.7	17.9	28.1	15.2	9.3	22.3
Retail & wholesale	23.4	7.9	28.0	26.3	7.6	31.1	25.0	7.7	29.6
Accommodat'n, cafes, restaurants	20.1	5.5	23.7	22.0	5.2	25.6	21.2	5.3	24.8
Transport, storage, communicat'n	35.6	8.6	38.7	42.6	5.5	46.0	38.9	7.2	42.1
Finance, property, bus. services	32.4	14.3	38.2	29.8	12.6	35.9	31.0	13.4	37.0
Government admin, defence	50.7	20.2	62.5	48.9	25.6	57.3	49.9	22.8	60.0
Health, educat'n, community serv.	19.1	8.2	26.3	35.0	14.4	43.5	31.5	13.0	39.7
Recreation, personal services	29.2	6.6	33.0	28.4	16.4	38.3	28.7	12.8	36.3
Hours per week	*0.858*	*0.000*	*0.056*	*0.004*	*0.000*	*0.000*	*0.076*	*0.000*	*0.000*
1-10	21.6	7.0	25.1	22.8	5.9	26.8	22.3	6.3	26.1
11-20	23.6	5.0	25.8	26.0	7.0	31.1	25.1	6.2	29.0
21-30	24.3	4.2	27.4	29.4	7.6	34.4	27.3	6.2	31.6
31-40	23.2	9.8	29.2	30.6	14.8	38.1	26.6	12.1	33.3
41 or more	24.6	12.8	32.4	30.4	16.5	40.8	26.3	13.8	34.8
Status	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*
Permanent	27.5	12.5	35.0	35.2	14.3	42.8	31.0	13.3	38.5
Casual	21.2	6.0	24.5	24.8	7.9	30.2	23.2	7.1	27.7
Tenure in job	*0.267*	*0.054*	*0.734*	*0.000*	*0.001*	*0.000*	*0.000*	*0.000*	*0.000*
Less than 6 months	23.6	7.5	29.2	21.9	5.7	26.1	22.6	6.5	27.5
6 - 12 months	25.1	8.1	29.3	32.4	9.4	38.5	29.1	8.8	34.4
13-24 months	26.1	9.3	31.3	31.9	12.6	38.7	29.0	11.0	35.1
More than 24 months	22.2	11.9	29.4	25.1	11.3	32.0	23.5	11.6	30.6
Gross weekly pay	*0.001*	*0.006*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*
$100 or less	19.0	5.3	22.3	17.0	5.7	21.3	17.8	5.6	21.7
$101-$200	22.5	5.6	26.3	25.8	5.6	29.5	24.5	5.6	28.3
$201-$300	19.7	7.9	23.7	29.6	12.2	37.2	24.7	10.1	30.5
$301-$400	25.5	8.8	30.7	26.2	11.1	32.5	25.8	10.0	31.6
$401-$500	23.7	10.1	30.8	34.8	17.8	43.3	28.5	13.4	36.2
More than $500	29.8	11.4	35.1	33.2	14.7	42.1	30.9	12.4	37.3
Job as a career	*0.005*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*
Yes	27.3	12.8	35.0	35.9	15.7	44.0	30.9	14.0	38.8
No, don't know	22.6	7.2	26.6	26.5	8.6	32.0	24.8	7.9	29.7

See *Notes to Tables*

5. ADEQUACY OF TRAINING

This chapter presents results for the distribution of responses to two questions that address the adequacy of the training received:

- [in regard to your job] *How satisfied are you with opportunities for training?* to which respondents could answer *Very satisfied*, *Fairly satisfied*, *Fairly dissatisfied*, *Very dissatisfied*, *Unsure* or *Not applicable. Very* and *Fairly satisfied* are combined as *Satisfied*, while *Very* and *Fairly dissatisfied* and *Unsure* are combined as *Not satisfied. Not applicable* responses were removed from the analysis.
- *In your job, do you think you've had* too much *job training,* too little, *or* about the right amount *for the work you do?* 'Too little' is the focus of interest. The responses *Too much* and *About right* were combined as 'Not too little'.

The two questions tap somewhat different issues about the adequacy of training provision. Satisfaction with training opportunities is possibly a more global measure. A respondent could be dissatisfied with training opportunities simply because the job requires little training while the worker would like to be developing their skills—they are in a dead-end job. A worker could be in such a job and judge that the level of training they have received is adequate (or even too much) relative to the low training requirements of the job. On the other hand, it is possibly a little less likely that a worker could be satisfied with his or her training opportunities and yet judge that the training provided was 'too little'.

Responses to the two questions, then, are neither wholly related nor independent. Any expected relationship between responses will also be confounded by the different sets of respondents who were asked each question. All respondents in paid employment were asked about their satisfaction with their opportunities for training, while only respondents who received some training were asked about the amount of their training.

The results for these two questions are presented in Tables 11, 12 and 13 for family and personal background, educational background and job characteristics respectively.

5.1 Family and Personal Background

There are relatively few relationships between any of the family background variables and either satisfaction with training opportunities or opinions about the adequacy of training—and any pattern of relationships that is statistically significant is not always consistent. Here we focus describe those few relationships that are statistically significant:

- The children of parents who were labourers or related workers were least likely to report too little training (12.3%) while respondents whose parents were in professional occupations were only marginally higher (13.3%). The children of managers and administrators (19.2%), tradespersons (20.5%) and plant operators and drivers (20.6%) were more likely to report too little training.

Table 11 Satisfaction with training opportunities and adequacy of training by selected background characteristics: Respondents employed as wage or salary earners since last interview and respondents who received training, 2000

	Satisfied with opportunities for training			*Too little training*		
	Currently employed as a wage or salary earner			*Recipients of training*		
	Male	*Female*	*Persons*	*Male*	*Female*	*Persons*
	%	%	%	%	%	%
All persons	81.4	79.9	80.6	16.4	16.4	16.4
Parents' occupation	*0.109*	*0.668*	*0.593*	*0.049*	*0.067*	*0.015*
Managerial or administrative	77.8	78.1	77.9	18.3	20.0	19.2
Professional	78.3	80.4	79.4	13.9	12.6	13.3
Para-professional	77.1	83.5	80.6	14.3	20.1	17.5
Tradesperson	83.1	77.8	80.7	25.9	15.2	20.5
Clerical	83.9	78.9	81.3	15.5	17.2	16.4
Sales, personal service	82.6	80.7	81.6	19.4	17.2	18.3
Plant operators, drivers	83.8	83.2	83.6	16.4	25.7	20.6
Labourer	83.0	79.3	81.2	12.1	12.4	12.3
Parents' education	*0.006*	*0.793*	*0.025*	*0.274*	*0.178*	*0.037*
Higher education qual.	75.9	79.1	77.6	15.0	14.6	14.8
Trade/technical qual.	82.5	79.8	81.3	19.5	20.4	20.0
Completed secondary school	83.5	80.7	82.0	14.4	15.8	15.2
Didn't complete sec. school	81.0	81.2	81.1	18.1	17.8	17.9
Parents' employment status	*0.604*	*0.111*	*0.087*	*0.191*	*0.001*	*0.002*
Both parents employed	83.3	82.3	82.8	21.2	9.1	14.1
One parent employed	79.7	76.3	77.9	19.7	23.4	21.7
No parent employed	81.6	80.5	81.0	15.7	15.6	15.6
Family wealth	*0.583*	*0.339*	*0.808*	*0.662*	*0.496*	*0.477*
High	81.2	80.3	80.7	17.7	17.1	17.4
Upper middle	80.4	80.7	80.6	16.0	14.6	15.2
Lower middle	81.3	77.9	79.4	15.3	17.3	16.4
Low	77.4	81.6	79.6	19.2	17.7	18.3
Parents' country of birth	*0.083*	*0.034*	*0.002*	*0.086*	*0.796*	*0.665*
Both NonEng-speaking country	79.9	78.0	78.9	21.5	13.7	17.3
Both Eng-speaking country	79.5	73.6	76.7	9.0	15.9	12.3
One NonEng-speaking country	80.4	78.8	79.5	17.6	16.4	17.0
One Eng-speaking country	76.6	76.5	76.5	14.2	17.4	16.0
Both born in Australia	83.2	81.7	82.4	16.0	16.8	16.4
Respondent's country of birth	*0.247*	*0.399*	*0.140*	*0.560*	*0.059*	*0.121*
Australian born	82.0	80.2	81.1	16.6	17.0	16.8
Born in English-speaking country	77.1	74.6	75.7	10.7	12.1	11.5
Born in nonEng.-speaking country	77.4	79.7	78.6	17.1	9.1	12.7
Language spoken at home	*0.363*	*0.544*	*0.262*	*0.132*	*0.857*	*0.361*
English	81.5	79.7	80.6	15.8	16.4	16.2
Other than English	84.3	81.7	83.1	21.9	15.8	18.6
Indigenous	*0.692*	*0.318*	*0.323*	*0.581*	*0.151*	*0.150*
Yes	83.9	84.9	84.5	12.5	8.1	10.0
No	81.5	79.8	80.6	16.4	16.5	16.5
Disability	*0.306*	*0.430*	*0.682*	*0.667*	*0.818*	*0.817*
Yes	72.6	90.7	77.7	21.5	12.4	18.7
No	81.5	79.9	80.7	16.4	16.4	16.4

See *Notes to Tables*

Table 12 Satisfaction with training opportunities and adequacy of training by selected educational characteristics: Respondents employed as wage or salary earners since last interview and respondents who received training, 2000

	Satisfied with opportunities for training			*Too little training*		
	Currently employed as a wage or salary earner			*Recipients of training*		
	Male	*Female*	*Persons*	*Male*	*Female*	*Persons*
	%	%	%	%	%	%
All persons	81.4	79.9	80.6	16.4	16.4	16.4
Literacy & numeracy	*0.000*	*0.000*	*0.000*	*0.607*	*0.177*	*0.926*
Highest quartile	76.6	74.2	75.5	14.7	19.5	17.0
Upper middle quartile	77.8	77.1	77.4	16.7	15.4	15.9
Lower middle quartile	82.6	82.6	82.6	16.9	16.3	16.6
Lowest quartile	88.4	86.2	87.3	18.0	14.4	16.3
Type of school	*0.453*	*0.130*	*0.124*	*0.324*	*0.484*	*0.188*
Government	82.0	80.2	81.1	16.9	16.4	16.6
Catholic	79.7	77.7	78.6	16.9	17.8	17.4
Other	80.5	83.0	81.7	12.9	14.2	13.6
Grade left school	*0.001*	*0.088*	*0.000*	*0.416*	*0.716*	*0.742*
Year 12	79.8	79.5	79.6	15.9	16.4	16.2
Year 11	86.5	79.8	84.1	16.5	18.1	17.1
Year 10 or 9	86.2	86.5	86.3	20.0	14.3	17.8
Post-school qualification	*0.233*	*0.066*	*0.035*	*0.021*	*0.198*	*0.485*
Yes	82.9	82.1	82.4	19.6	14.7	17.1
No	80.8	79.1	80.0	15.1	17.1	16.1
Study in 2000	*0.000*	*0.000*	*0.000*	*0.301*	*0.004*	*0.004*
Full-time study	74.6	74.2	74.4	16.1	15.0	15.4
Part-time study	81.3	85.2	83.6	15.2	6.5	10.5
Apprenticeship	93.9	91.0	93.6	13.1	18.3	13.8
Traineeship	91.9	94.3	93.3	15.7	16.7	16.2
None	77.9	81.6	79.9	18.4	19.1	18.8

See *Notes to Tables*

- Respondents in families in which only one parent was working were more likely to report too little training than were families in which either both parents were working or no parent was working. The difference in training provision arose principally from differences for female workers.
- Respondents with at least one parent with a higher education qualification were least likely to be satisfied with training opportunities but also least likely to report that they received too little training. The differences, although statistically significant, are small.
- Workers whose parents were both born in Australia were slightly more likely to be satisfied with their training opportunities than were other respondents. Again, although the differences are statistically significant, they are small.

5.2 Educational Background

The various measures of educational background in Table 12 show almost no relationship with respondents' judgements of whether they receive too much or too little training. There are, however, some consistent patterns for satisfaction with training opportunities. Respondents with higher levels of literacy and numeracy were less likely to be satisfied with their training opportunities (75.5%) than respondents with lower levels of training opportunities (87.3%). Similarly, respondents who completed Year 12 were less likely to be satisfied with training opportunities (79.6%) than were respondents who left in Year 10 or earlier (86.3%). Workers studying full-time (74.4%) or no studying at all (79.0%) reported lower levels of satisfaction with training than workers who were undertaking an apprenticeship (93.6%) or a traineeship (93.3%).

5.3 Employment Characteristics

Respondents in lower skill occupations are less satisfied with their training opportunities than are respondents in higher skill occupations. Although the relationship is less clear for judgements about the amount of training, it appears that respondents in lower skill occupations are less likely to believe they receive too little training. The apparent contradiction can be resolved if it is accepted that low skill jobs require less training (and hence fewer respondents in those occupations believe they require more training) but that respondents are unhappy with this aspect of their job (and hence less satisfied with their training opportunities).

Respondents working in Government administration and defence (92.5%) industries are more likely to be satisfied with their training opportunities than are respondents working in the retail and wholesale (72.3%), accommodation (72.5%) and recreation and personal service (76.3%) industries. Respondents working in health, education and community service (21.8%), manufacturing and utilities (20.7%) and retail and wholesale (19.3%) were more likely to report too little training than were respondents in housing (7.4%) and government administration (8.5%).

Young workers least satisfied with their training opportunities:

- work fewer hours
- are employed on a casual basis
- have been in the job for more than two years
- receive lower weekly pay
- don't consider their job as part of their career.

Young workers who believe they receive too little training:

- work between 20 and 40 hours
- have been in the job for more than a year
- don't consider their job as part of their career.

Table 13 Satisfaction with training opportunities and adequacy of training by selected employment characteristics: Respondents employed as wage or salary earners since last interview and respondents who received training, 2000

	Satisfied with opportunities for training			*Too little training*		
	Currently employed as a wage or salary earner			*Recipients of training*		
	Male	*Female*	*Persons*	*Male*	*Female*	*Persons*
	%	%	%	%	%	%
All persons	81.4	79.9	80.6	16.4	16.4	16.4
Occupation	*0.000*	*0.000*	*0.000*	*0.008*	*0.019*	*0.000*
Managerial & administrative	95.2	98.9	97.2	29.1	3.6	14.0
Professional	86.1	91.1	88.7	18.7	30.4	25.2
Associate professional	86.8	85.7	86.3	19.7	18.0	18.9
Tradesperson	90.1	91.3	90.2	17.1	13.3	16.7
Advanced clerical, service	96.9	85.4	86.3	12.0	15.1	14.8
Intermediate clerical, sales service	76.3	82.2	80.7	20.8	17.8	18.5
Intermediate production, transport	76.7	81.4	77.5	18.3	15.9	17.7
Elementary clerical, sales service	71.6	75.4	74.1	16.3	14.5	15.1
Labourers & related	77.9	69.5	75.1	8.3	13.0	9.8
Industry	*0.000*	*0.000*	*0.000*	*0.300*	*0.048*	*0.089*
Primary industry	87.7	77.4	85.1	9.8	9.6	9.7
Manufacturing & utilities	82.6	80.8	82.1	14.1	18.5	15.2
Housing	90.1	86.1	89.7	14.9	6.8	14.1
Retail & wholesale	76.8	76.5	76.6	18.6	15.8	17.1
Accommodat'n, cafes, restaurants	77.8	75.9	76.8	18.4	22.3	20.7
Transport, storage, communicat'n	85.4	92.3	88.7	17.2	4.8	11.1
Finance, property, bus. services	79.0	85.4	82.5	15.8	16.4	16.1
Government admin, defence	92.7	92.3	92.5	21.8	12.3	17.5
Health, educat'n, community serv.	83.6	84.2	84.1	17.4	17.1	17.2
Recreation, personal services	84.9	77.7	80.3	9.8	16.5	14.2
Hours per week	*0.000*	*0.000*	*0.000*	*0.070*	*0.120*	*0.007*
1-10	70.6	72.4	71.7	14.4	14.4	14.4
11-20	74.8	76.0	75.5	13.5	13.5	13.5
21-30	73.0	78.6	76.4	22.3	17.0	19.0
31-40	86.3	86.0	86.2	18.1	18.8	18.5
41 or more	86.4	83.7	85.7	14.2	14.8	14.4
Status	*0.000*	*0.000*	*0.000*	*0.155*	*0.290*	*0.086*
Permanent	87.3	85.4	86.4	17.0	17.1	17.0
Casual	74.1	75.6	74.9	14.3	15.2	14.9
Tenure in job	*0.350*	*0.000*	*0.000*	*0.012*	*0.191*	*0.006*
Less than 6 months	83.5	84.2	83.9	7.7	13.5	11.1
6 - 12 months	84.9	85.2	85.1	15.2	14.8	15.0
13-24 months	79.2	78.5	78.8	17.3	18.3	17.8
More than 24 months	81.1	74.1	77.9	17.5	15.3	16.5
Gross weekly pay	*0.000*	*0.000*	*0.000*	*0.299*	*0.024*	*0.056*
$100 or less	67.8	70.1	69.2	14.3	18.5	17.0
$101-$200	70.9	76.0	74.2	13.2	12.1	12.5
$201-$300	81.0	81.4	81.2	16.7	16.6	16.6
$301-$400	88.3	84.5	86.4	17.3	18.8	18.1
$401-$500	81.7	82.3	82.0	20.7	15.7	18.5
More than $500	85.0	87.4	85.7	15.7	22.9	18.1
Job is a career	*0.000*	*0.000*	*0.000*	*0.004*	*0.106*	*0.002*
Yes	95.7	93.7	94.8	13.1	14.1	13.6
No, don't know	70.5	74.0	72.5	18.5	17.1	17.7

See *Notes to Tables*

Notes to Tables

Table 3

1. Results are for:
   (a) The current main job (the job in which they worked most hours) of persons employed at the time of interview; and
   (b) The most recent job of persons not employed at the time of interview but who had been employed since the previous interview.
2. Results are weighted to correct for the initial sample design and subsequent attrition. Numbers of respondents, however, are unweighted.
3. The number of respondents are the number who were currently employed as wage or salary earners or who had been employed since their last interview and the number who received some training respectively.
4. Mean hours of training are for respondents who received some in-house or external training only (that is, the means do not include zero hours for respondents who received no training).
5. The question whether job training could help the respondent to get a promotion, pay rise or a more responsible position was not asked of persons not currently employed. A consequential sequencing problem in the interview schedule meant that responses to the question *Job training could help the respondent to get a more responsible kind of job, doing the same kind of work, with another employer* are difficult to interpret for this group. Hence results in the table for these two questions are only for respondents currently employed (n=1615, 1768 and 3383 respectively).

Table 5, 6 & 7

1. Detailed description of the variables is provided in Chapter 3.
2. The overall sample size is 7899 and 3718 and 4171 for males and females respectively.
3. Percentages are weighted and hence simple addition and subtraction of values can produce apparent inconsistencies.
4. Two sets of percentages are presented—one set percentaged on the whole sample including missing values, the second set percentaged on valid responses only.
5. *Status* and *Job is a career* are for persons currently employed only.

Table 8, 9 & 10

1. The overall sample size is 7899 and 3718 and 4171 for males and females respectively.
2. Percentages are weighted and hence simple addition and subtraction of values can produce apparent inconsistencies.
3. Two sets of percentages are presented—one set percentaged on the whole sample including missing values, the second set percentaged on valid responses only.
4. Values in italics are weighted least squares estimates of statistical significance.
5. *Status* and *Job is a career* are for persons currently employed only.

Table 11, 12 & 13

1. The overall sample size for the left panel is 7899 and 3718 and 4171 for males and females respectively. The overall sample size for the right panel is 3659 and 1704 and 1955 for males and females respectively.
2. Percentages are weighted and hence simple addition and subtraction of values can produce apparent inconsistencies.
3. Two sets of percentages are presented—one set percentaged on the whole sample including missing values, the second set percentaged on valid responses only.
4. Values in italics are weighted least squares estimates of statistical significance.
5. *Status* and *Job is a career* are for persons currently employed only.

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